

Program Progress Report

Institutional Quality Assurance Program (IQAP) Review

Graduate Diploma in Clinical Epidemiology

Date of Review: February 28th, 2023

Date of Progress Report: May 28th, 2025

Progress Report Prepared by: Robby Nieuwlaat (GDCE Director)
and Gabi Watson (Program Manager, Education)

Please outline below how recommendations from the initial program review have been addressed.
[Please fill in one table for each recommendation from the original Final Assessment Report]

Recommendation 1: Revisit the GDCE Program philosophy of making a core clinical epidemiology program that is accessible, given cost of the program.
Responsibility for Implementation: Program Director/Program Manager
Anticipated Timeline for Completion: September 2026/ ongoing
Additional Notes/Commentary: Program Director, Robby Nieuwlaat is in discussion with the HEI Department Chair regarding reduction of fees for selected persons or groups in financial need. In the meantime, we have awarded a \$5,000 department bursary in September 2024 to a GDCE student who would otherwise not have the means to join the program. We are exploring a yearly bursary for students in financial need, with a more systematic approach. We are also exploring the possibility of OSAP funding support for Ontario residents.
Progress (check one) ☐ Completed ☒ In Progress ☐ Other (please explain)
Department's Comments: Will work with program director to establish a formal approach for identifying and supporting students who need bursaries and to explore additional sources of funding support.
Dean's Comments: There are currently restrictions on the eligibility of part-time students to receive financial support. The Department is actively collaborating with the School of Graduate Studies to identify the most effective mechanisms to address this issue.

QAC Comments (to be filled in by Quality Assurance Committee):

QAC reviewed this report and had no further comments or concerns

Recommendation 2: Clarify wording of program learning outcomes (PLO) 4 & 6:

- *Critically appraise the quantitative research methods used in published articles and research protocols after conducting a systematic review that requires the assessment of risk of bias and certainty of the evidence;*
- *Use the updated reference lists of the GDCE courses to understand how the rapidly evolving nature of clinical epidemiology seeks to overcome the methodological limits of the discipline*

Responsibility for Implementation: Program Manager

Anticipated Timeline for Completion: Changes implemented January 2024

Additional Notes/Commentary:

The GDCE Program Committee approved revised PLOs in November 2023 as follows:

4. Critically appraise the research methods in publications and protocols using the assessment of risk of bias and certainty of the evidence in the context of a systematic review;

6. Use the literature from the GDCE courses and critical appraisal skills to understand how the discipline of clinical epidemiology continuously seeks to improve and overcome its methodological limits.

We also updated our Graduate Survey (January 2024) to include the following question: The program learning objectives upon successful completion of GDCE are for the student to be able to... [list PLOs]. On a scale of 1 to 7, please rate how well each of these program learning outcomes have been met.

Progress (check one)

☒ Completed

☐ In Progress

☐ Other (please explain)

Department's Comments:

New language is clearer and appropriately reflects the intent of the program.

Dean's Comments:

We are satisfied with the Program's response.

QAC Comments (to be filled in by Quality Assurance Committee):

See above

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Recommendation 3: Collect data in a systematic fashion from faculty and students to assess whether the current Learning Outcomes are met and whether resources are adequate to meet the program requirements.
Responsibility for Implementation: Program Manager
Anticipated Timeline for Completion: Changes implemented September 2023 - August 2024.
Additional Notes/Commentary: We have reviewed and revised course-specific and program-specific evaluation surveys to ensure adequate information is captured at the optimal time. We added a question regarding PLOs to the graduate survey in January 2024, to get feedback from recent alumni about whether PLOs were achieved. We also obtained feedback from an educational developer on our planned revisions. We confirmed with Greg Van Gastel that our changes are sufficient to meet the recommendation.
Progress (check one) ☒ Completed ☐ In Progress ☐ Other (please explain)
Department's Comments: The next and equally important step is to use these data to inform program amelioration.
Dean's Comments: We agree that ongoing evaluation is a key component of continuous quality improvement.
QAC Comments (to be filled in by Quality Assurance Committee): See above

Recommendation 4: Require that students admitted have completed a basic undergraduate course in research statistics (i.e., that covers the basics of elementary probability, basic descriptive statistics, hypothesis testing, and introductory parametric/nonparametric tests).

Responsibility for Implementation: Program Director and Admissions Committee
Anticipated Timeline for Completion: November 2023
Additional Notes/Commentary: The GDCE Program Committee voted against this change in the November 2023 Committee Meeting. The Health Research Methodology program does not require a Biostatistics course for admission, and we remain in line with their requirements. In addition, the Introduction to Biostatistics course (774) is an introductory course and as such should not require a similar course as prerequisite.
Progress (check one) ☐ Completed ☐ In Progress X Other (please explain) No change to be implemented.
Department's Comments: Agreed. The GDCE provides an introductory course in biostatistics.
Dean's Comments: We are satisfied with the program's response.
QAC Comments (to be filled in by Quality Assurance Committee): See above

Recommendation 5: The program does not include a foundations course in epidemiology. It is recommended to cover foundations in epidemiology with one of three approaches: 1) the Program considers requiring applicants to have completed an introductory epidemiology course before admission; 2) a foundations course in epidemiology will be added into in the GDCE curriculum as a fifth course; 3) a foundational course in epidemiology replaces the HTHRSM 771 course.
Responsibility for Implementation: Program Manager, Course coordinators for HTHRSM 771
Anticipated Timeline for Completion: September-December 2024
Additional Notes/Commentary: The Program Committee voted not to add an epidemiology course or replace the foundations course (771) with a course in epidemiology. The committee felt that the 771 course is already a large

extent an introduction to clinical epidemiology course in all but name, and as it is equivalent to the HRM 721 course in the HRM MSc program, it should not deviate importantly from their curriculum.

In place of this, an additional lecture has been added during the first week of 771 to explicitly address basic epidemiological concepts. The course then expands on this, linking to further health research methods as already included.

The readings and materials in HTHRSM 771 have also been refreshed for Fall 2024 and now include additional lectures on Clinical Practice Guidelines and Prognostic Studies.

Progress (check one)

☒ Completed

☐ In Progress

☐ Other (please explain)

Department's Comments: Agreed. The content is appropriate, but the name of the course might be misleading. A fifth course would be logistically challenging to implement, but the additional lecture would ground the concepts of epidemiology for the rest of the program to build upon.

Dean's Comments:

We agree that alignment with the HRM curriculum is an important consideration, and we are satisfied with the program's position that course 771 offers an appropriate and sufficient introduction

QAC Comments (to be filled in by Quality Assurance Committee):

See above

Recommendation 6: If the GDCE team does not take action based on Recommendation 5, consider changing the name of the program to include all methods taught (e.g. 'Graduate Diploma Program in Clinical Research Methods').

Responsibility for Implementation: Program Director, Program Committee.

Anticipated Timeline for Completion: N/A

Additional Notes/Commentary:

See above for Recommendation 5. The GDCE Program Committee voted unanimously against changing the name of the program at our November 2023 meeting.

Progress (check one)

☐ Completed

☐ In Progress ☒ Other (please explain) No change to be implemented.
Department's Comments: Recommendation 5 has been addressed, so a name change is not required now.
Dean's Comments: We note that a vote by the GDCE Program Committee does not, in itself, constitute a sufficient rationale. We consider the program name to be a critical component of its overall marketing strategy. We encourage the Department to continuously assess whether the term "Clinical Epidemiology" resonates with the prospective applicants they aim to attract. It's worth recalling that the Department was previously named "Clinical Epidemiology and Biostatistics," and that the name was changed due to concerns about its appeal.
QAC Comments (to be filled in by Quality Assurance Committee): See above

Recommendation 7: If HTHRSM 771 remains in the curriculum, update the Program Learning Outcomes, analysis course (HTHRSM 774), and systematic review course (HTHRSM 773) to include learning goals, analysis, and systematic review methods as relevant for qualitative research, as qualitative research is introduced in HTHRSM 771 but does not appear in any of the other courses.
Responsibility for Implementation: HTHRSM 771 Course Coordinators
Anticipated Timeline for Completion: Changes implemented September-December 2024
Additional Notes/Commentary: Since Qualitative Research is only covered in this one unit for HTHRSM 771 and is not covered in the rest of the program, the Qualitative Research module will be presented as a bonus module in the HTHRSM 771 course, rather than a required unit. Note that other research methods are introduced in this course, without specific mention in future courses also.
Progress (check one) ☒ Completed ☐ In Progress ☐ Other (please explain)
Department's Comments: It is understood that in-depth qualitative content is beyond the scope of the GDCE.

Dean's Comments:

This recommendation and the corresponding response raise important questions about the overall scope of the program. Rather than offering deep specialization in a narrow area, this brief diploma is designed to provide an introductory overview of fundamental topics in clinical epidemiology. If the foundational elements of clinical epidemiology are understood to be quantitative approaches to clinical trials and systematic reviews, then the program's current focus may be appropriately aligned.

QAC Comments (to be filled in by Quality Assurance Committee):

See above

Recommendation 8: The Program Learning Outcome "Understanding biostatistics at a level sufficient to complete a results/discussion section of a scientific paper" may be difficult to achieve with a single biostatistics course. If action is taken for Recommendation 4, the emphasis on basic statistics could be reduced in favour of more hands-on instruction on relevant biostatistical methods in clinical epidemiology using analytic software in the lectures and tutorials. Selecting a specific software for students in this class is also recommended.

Responsibility for Implementation: Program Director, Program Manager, HTHRSM 774 Course Coordinator

Anticipated Timeline for Completion: January 2025-January 2026

Additional Notes/Commentary:

The HTHRSM 774 course will be refreshed, reducing emphasis on theory of basic statistics in favour of more hands-on instruction on relevant biostatistical methods in clinical epidemiology. To achieve this, we will remove some of the quizzes and replace them with weekly hands-on practical analysis assignments that will be discussed in tutorial sessions.

All students in the GDCE program are already routinely provided with a 6-month license to SPSS statistical software and are encouraged to use SPSS to facilitate group discussions during the course.

Progress (check one)

☐ Completed

X In Progress

☐ Other (please explain)

Department's Comments: Agreed. It is unlikely that any number of courses would lead to full proficiency in biostatistical scientific writing, as this comes with experience and exposure. The course permits students to understand the level of reporting detail required without in-depth knowledge of all biostatistical techniques.

Dean's Comments:

We are satisfied with the program's response.

QAC Comments (to be filled in by Quality Assurance Committee):

See above

Recommendation 9: Enhance student interaction with the pool of core faculty members to enrich their learning and educational experience within GDCE.

Responsibility for Implementation: Program Director, Program Manager

Anticipated Timeline for Completion: September 2025

Additional Notes/Commentary:

- GDCE students are invited to HEI Department rounds, which give the option of hybrid attendance (delivered live, with zoom link).
- GDCE students are invited to attend and participate in the annual HEI Research Day. Last year, two GDCE students were selected to present their work.
- The program will arrange for a mid-term check-in session (trialled with our Graduate Diploma in Community and Public Health program last year) with access to two faculty members working in the field. The GDCE student ambassador will be asked to assist with this session, collecting feedback from classmates.
- We considered holding some of our unit lectures live on Zoom, instead of pre-recorded, but feedback from students in our sister program GDCPH showed that this was not a popular option. Also, GDCE students typically work besides their studies and would prefer to do most of their learning asynchronously.

Progress (check one)

☐ Completed

X In Progress

☐ Other (please explain)

Department's Comments: Several opportunities exist for GDCE students to interact with core faculty.

Dean's Comments:

While it is understood that an online diploma program offers limited opportunities for students to engage with faculty outside of coursework, the program's response demonstrates that such opportunities do exist for GDCE students.

At the Master's level, student engagement is naturally supported through the mentorship inherent in thesis or project-based education. As the program continues to evolve—particularly with the potential introduction of electives—it may be worthwhile to consider offering a project-based course to further enrich student interaction and academic experience.

QAC Comments (to be filled in by Quality Assurance Committee):

See above

Recommendation 10: To enhance the program's diversity in terms of students and offerings, three recommendations are made: 1) EDI training for all faculty members involved in GDCE teaching; 2) Funding support to applicants from low-resource settings, both nationally and globally; 3) Add more online courses to widen the range of options for students.

Responsibility for Implementation: Program Director, Program Manager

Anticipated Timeline for Completion: September 2025/ ongoing

Additional Notes/Commentary:

- 1) All members of the Admissions committee and course instructors are required to complete the EDI training.
- 2) The GDCE Director is discussing program budget for a bursary with the HEI department Chair (see Recommendation 1)
- 3) The Program Committee discussed how we could add courses to the GDCE offering. Adding courses should not lead to important variation in what graduates have completed to obtain the GDCE diploma and otherwise may require creating streams within the program (similar to HRM). We will need to consider if this model is appropriate for GDCE. Using topic-specific GD's with fixed courses may be preferred for the target audiences (GDCE, GDCPH, potential GD programs on other topics). As more GD's are being developed, we will keep exploring with the GDCE Program Committee if expanding course offerings is feasible and desirable.

Progress (check one)

- ☐ Completed
☒ In Progress
☐ Other (please explain)

Department's Comments:

I recommend an EDI expert participating in the admissions committee.
We must review the costs of creating additional offerings while avoiding direct competition with other programs.

Dean's Comments:

We agree that Equity, Diversity, and Inclusion (EDI) should be explicitly addressed in the admissions process. For a discussion on financial support for part-time students, please refer to the response to Recommendation 1.

Several reviewer comments raise important questions regarding the appropriate breadth of the program. These observations suggest a need for ongoing reflection on the program's scope and structure to ensure it aligns with its intended goals and audience.

QAC Comments (to be filled in by Quality Assurance Committee):

See above